

## DETAILED ACTION

This communication is in response to amendment received on 8/18/08.

Claims 8 – 9, 12 – 13, 19 – 32, 34 – 40 and 42 – 45 are presented for examination.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 – 9, 12 – 13, 19 – 32 and 34 - 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stauth et al. (6,693,419).

As to claims 8, 19 – 32, 34 – 40 and 42, Stauth et al. (hereinafter Stauth) discloses a proximity detector comprising a single sensor element (62, fig. 3), said single sensor element (62) providing a sensor signal that varies with the measured parameter; a first output circuit (64) responsive to the sensor signal and providing a first output signal; a second output circuit (68) responsive to the sensor signal and providing a second output signal, wherein the first and second output signals are two of multiple outputs from the single sensor element (62), and wherein the first output circuit (64) and the second output circuit (68) change the sensor signal in a different manner so that the first output signal and the second output signal change differently from each other during normal operation of the system; and a supervisor circuit (58), said supervisor

circuit monitoring the sensor element and the output circuits (col. 4, lines 32 - 54). Stauth fails to explicitly disclose that the supervisor circuit forcing the first or second output signals to change to a diagnostics range in response to an electric failure with the sensor element or the output circuits and combinations thereof. However, Stauth discloses change in the signal as a result of the magnetic articles passing the sensor element. Therefore the limitation of change in the output signals due to an electric failure is just an intended use of the device. The output signals will also change as a result of mechanical failure or passing of the magnetic article not just during an electric failure. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Stauth's device to monitor the sensor elements and the output circuits in response to electric failure, mechanical failure, passing of magnetic articles and other such problems (Note MPEP 2144 IV).

As to claims 9, 12 – 13, and 43 – 45, Stauth discloses a proximity detector comprising a single sensor element (62, fig. 3) for sensing the parameter, said single sensor element (62) providing a sensor signal; shared circuits (60) coupled to the sensor element (62), said shared circuits providing sensing system operations; a first output circuit (64) responsive to the sensor signal from the shared Circuits, said first output circuit providing a first output signal; a second output circuit (68) responsive to the sensor signal from the shared circuits (60), said second output circuit (68) providing a second output signal, wherein the first and second output signals are multiple outputs from the sensor element; and a supervisor circuit (58), said supervisor circuit monitoring the sensor element, output circuits, and the shared circuits, said supervisor circuit

forcing the first or second output signals to change to a diagnostics range in response to a problem with the sensor element, the output circuits, or the shared circuits (col. 4, lines 32 - 54). Stauth fails to explicitly disclose that a supervisor circuit, said supervisor circuit monitoring the sensor element, output circuits, and the shared circuits, said supervisor circuit forcing the first or second output signals to change to a diagnostics range in response to an electrical failure with the sensor element, the output circuits, or the shared circuits and combinations thereof. However, Stauth discloses change in the signal as a result of the magnetic articles passing the sensor element. Therefore the limitation of change in the output signals due to an electric failure is just an intended use of the device. The output signals will also change as a result of mechanical failure or passing of the magnetic article not just during an electric failure. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Stauth's device to monitor the sensor elements and the output circuits in response to electric failure, mechanical failure, passing of magnetic articles and other such problems (Note MPEP 2144 IV).

### ***Response to Arguments***

Applicant's arguments with respect to claims 8 – 9, 12 – 13, 19 – 32, 34 – 40 and 42 – 45 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Reena Aurora

/Reena Aurora/

Primary Examiner, Art Unit 2862